



STATE OF MARYLAND

# DMHM

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**July 22, 2011**

## **Public Health & Emergency Preparedness Bulletin: # 2011:28** **Reporting for the week ending 07/16/11 (MMWR Week #28)**

### **CURRENT HOMELAND SECURITY THREAT LEVELS**

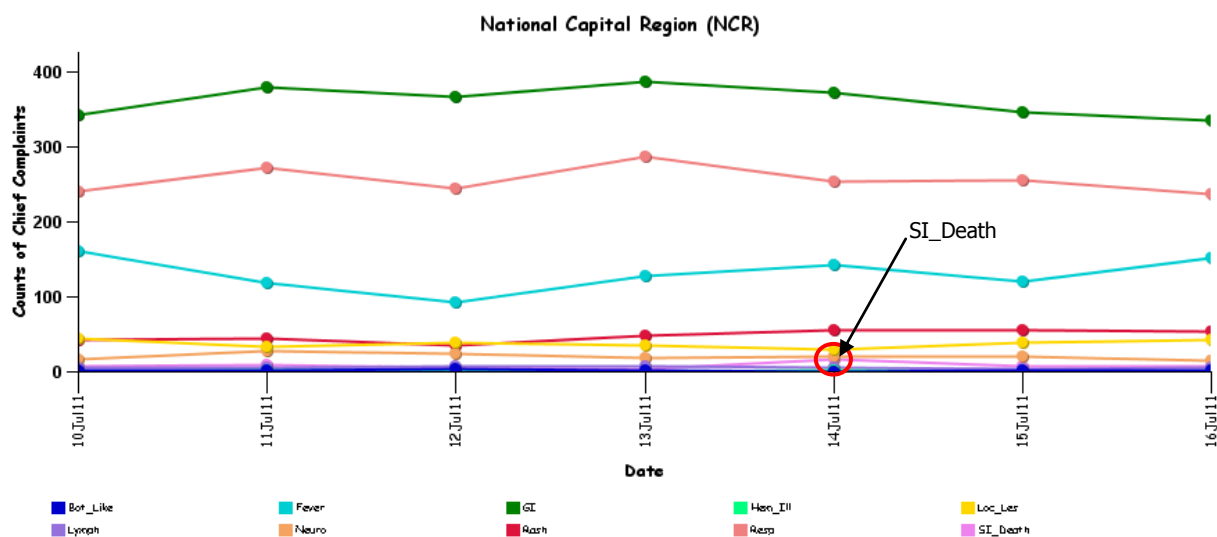
**National:** No Active Alerts  
**Maryland:** Level One (MEMA status)

### **SYNDROMIC SURVEILLANCE REPORTS**

#### **ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):**

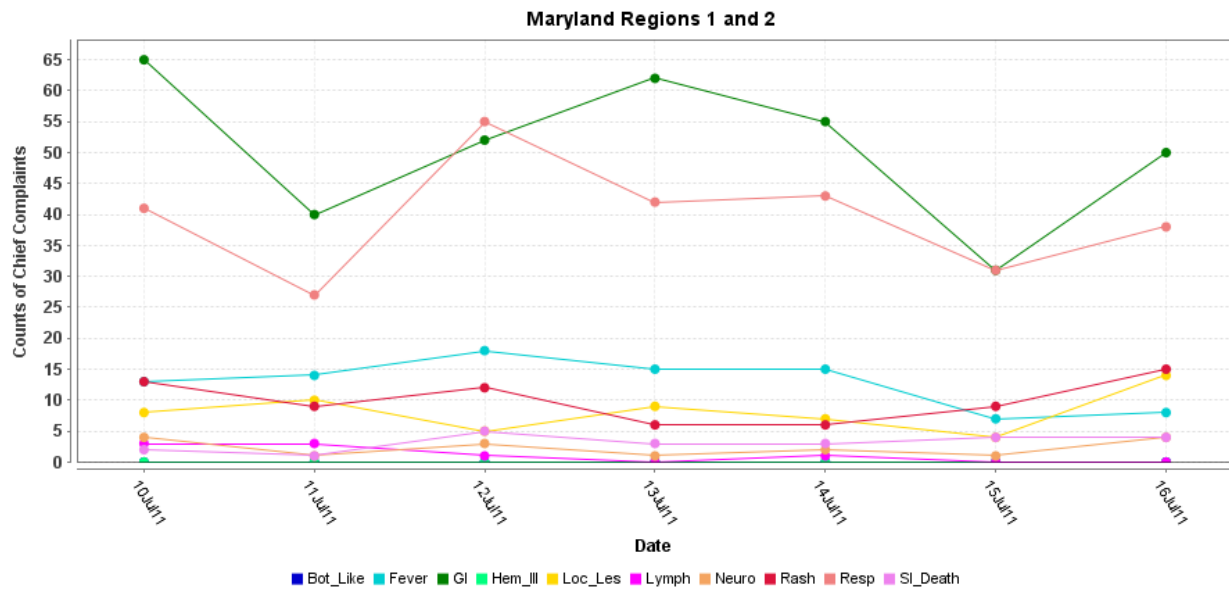
Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Red alerts are generated when observed count for a syndrome exceeds the 99% confidence interval. Note: ESSENCE – ANCR uses syndrome categories consistent with CDC definitions.

Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.

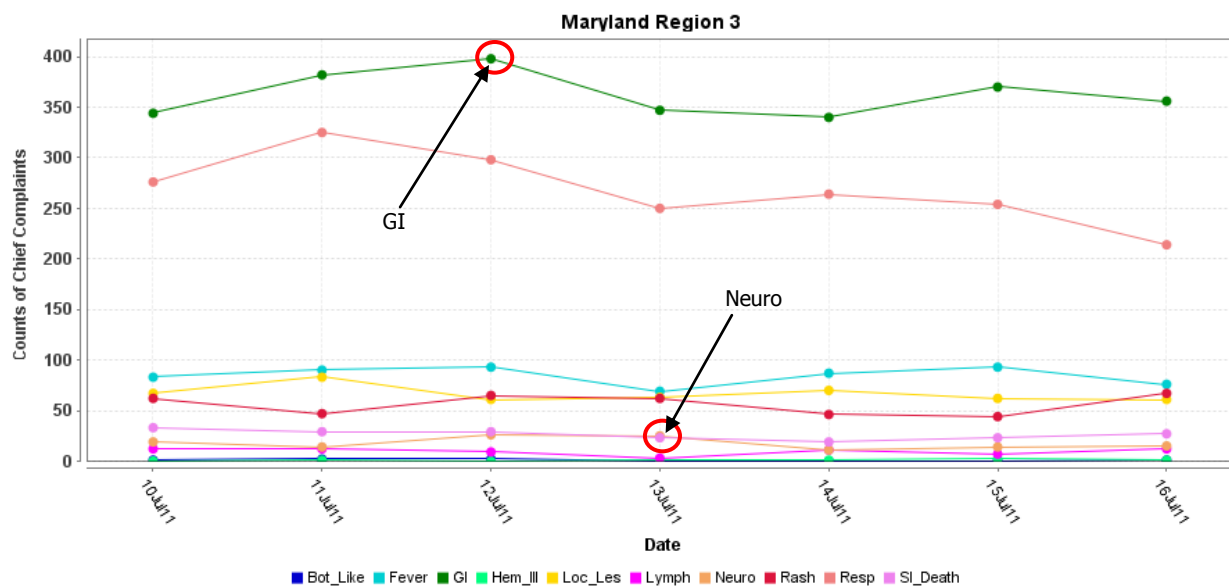


\*Includes EDs in all jurisdictions in the NCR (MD, VA, and DC) reporting to ESSENCE

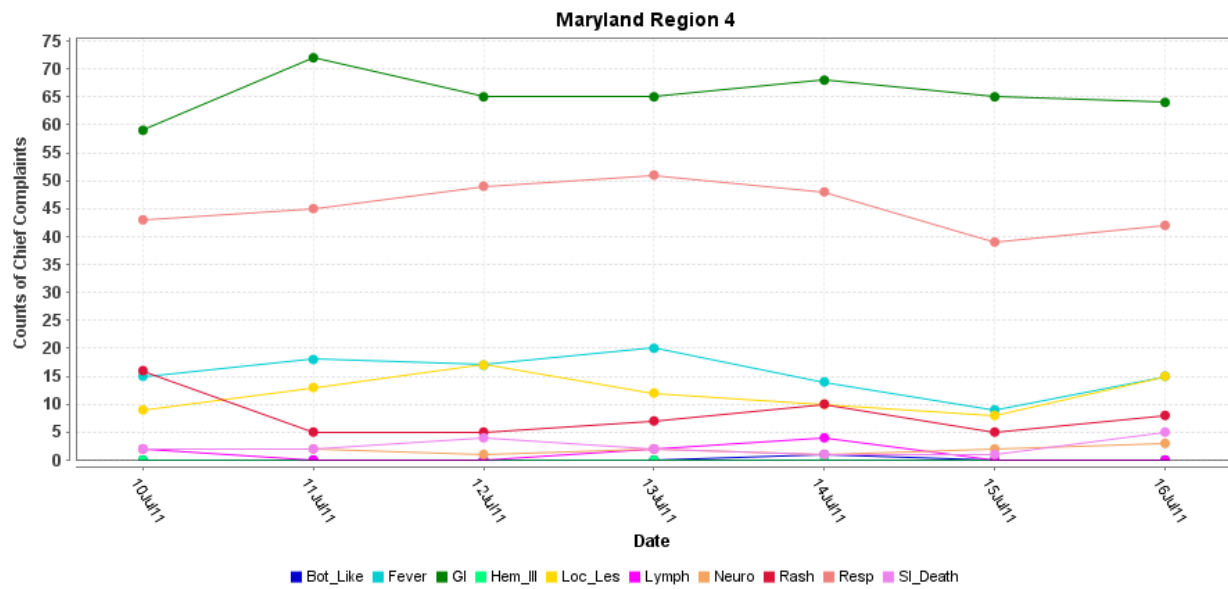
## MARYLAND ESSENCE:



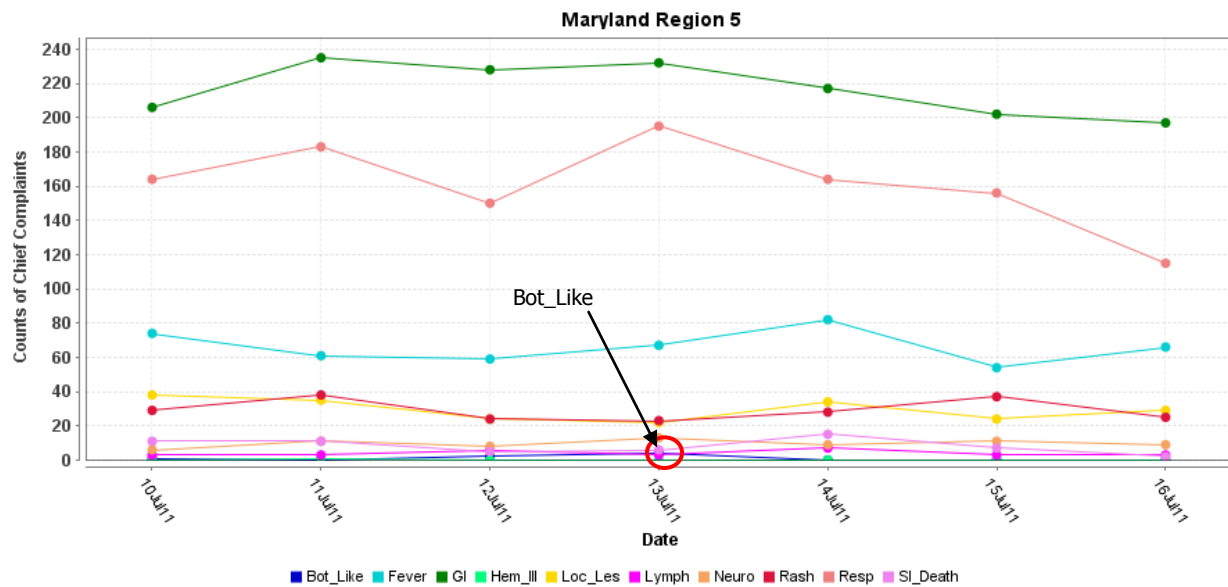
\* Region 1 and 2 includes EDs in Allegany, Frederick, Garrett, and Washington counties reporting to ESSENCE



\* Region 3 includes EDs in Anne Arundel, Baltimore City, Baltimore, Carroll, Harford, and Howard counties reporting to ESSENCE



\* Region 4 includes EDs in Cecil, Dorchester, Kent, Somerset, Talbot, Wicomico, and Worcester counties reporting to ESSENCE

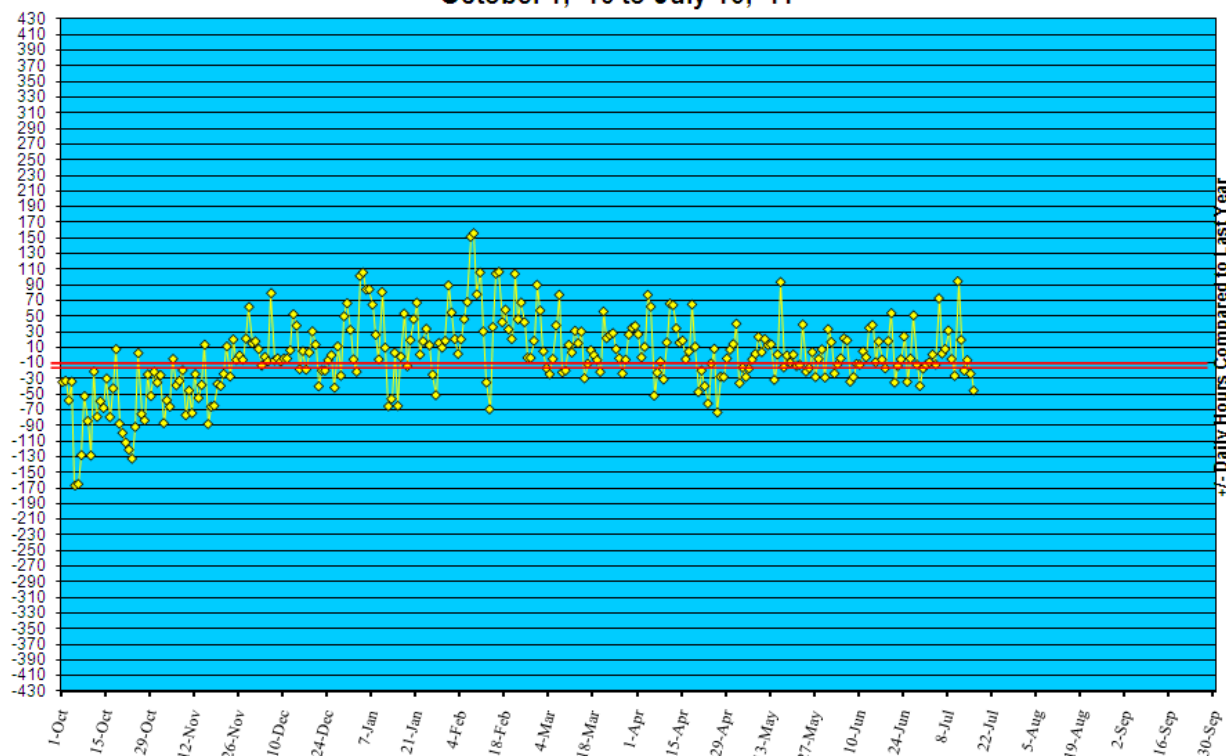


\* Region 5 includes EDs in Calvert, Charles, Montgomery, Prince George's, and St. Mary's counties reporting to ESSENCE

## REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

**YELLOW ALERT TIMES (ED DIVERSION):** The reporting period begins 10/01/10.

### Statewide Yellow Alert Comparison Daily Historical Deviations October 1, '10 to July 16, '11



## REVIEW OF MORTALITY REPORTS

**Office of the Chief Medical Examiner:** OCME reports no suspicious deaths related to an emerging public health threat for the week.

## MARYLAND TOXIDROMIC SURVEILLANCE

**Poison Control Surveillance Monthly Update:** Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in June 2011 did not identify any cases of possible public health threats.

## REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

### COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

<b>Meningitis:</b>	<b><u>Aseptic</u></b>	<b><u>Meningococcal</u></b>
New cases (July 10 – July 16, 2011):	13	0
Prior week (July 3 – July 9, 2011):	9	0
Week#28, 2010 (July 11 – July 17, 2010):	10	0

**2 outbreaks were reported to DHMH during MMWR week 28 (July 10-16, 2011).**

**1 Foodborne outbreak**

1 outbreak of GASTROENTERITIS/FOODBORNE associated with a Private Home

**1 Rash illness outbreak**

1 outbreak of SCABIES in an Assisted Living Facility

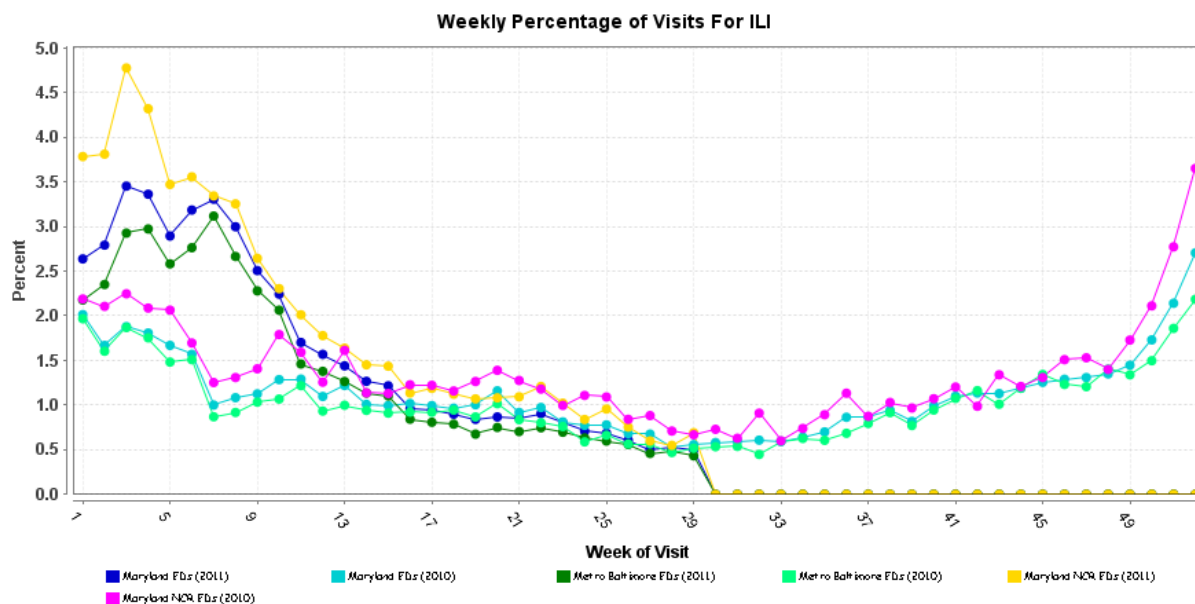
**MARYLAND SEASONAL FLU STATUS**

Seasonal Influenza reporting occurs October through May.

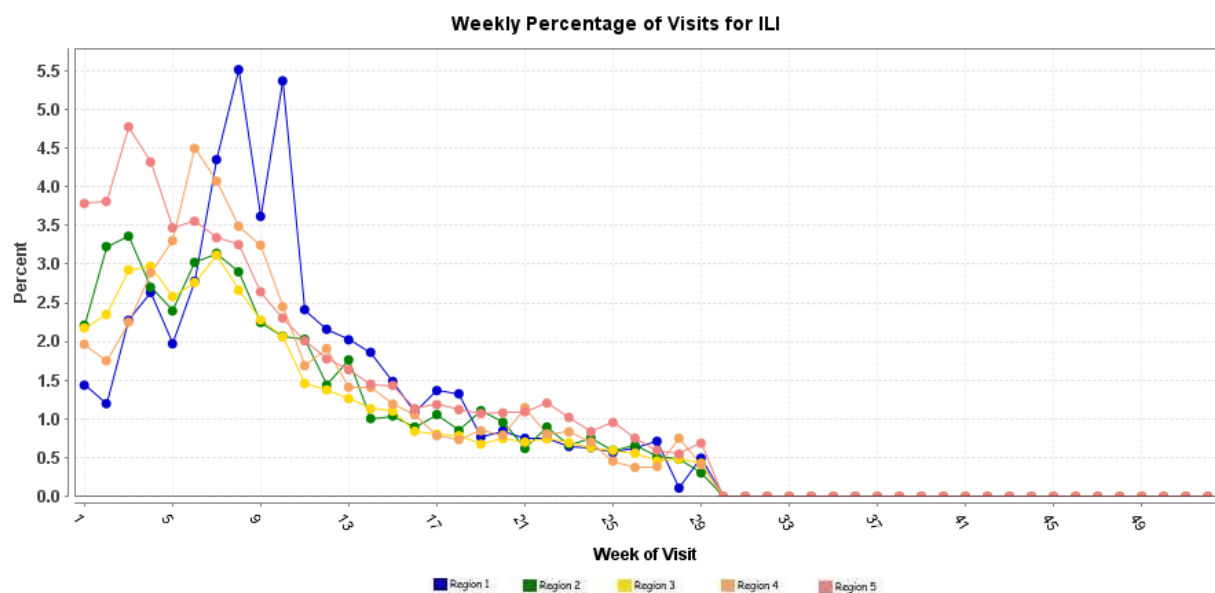
**SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS**

Graphs show the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. These graphs do not represent confirmed influenza.

Graphs show proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the week.



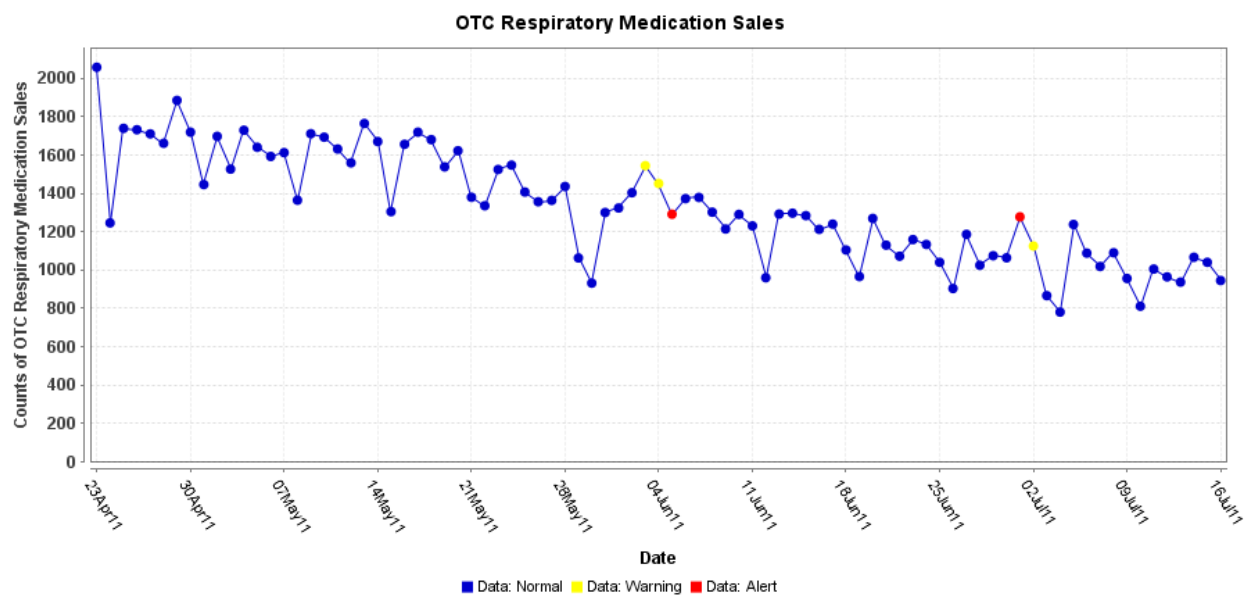
\* Includes 2010 and 2011 Maryland ED visits for ILI in Metro Baltimore (Region 3), Maryland NCR (Region 5), and Maryland Total



\*Includes 2011 Maryland ED visits for ILI in Region 1, 2, 3, 4, and 5

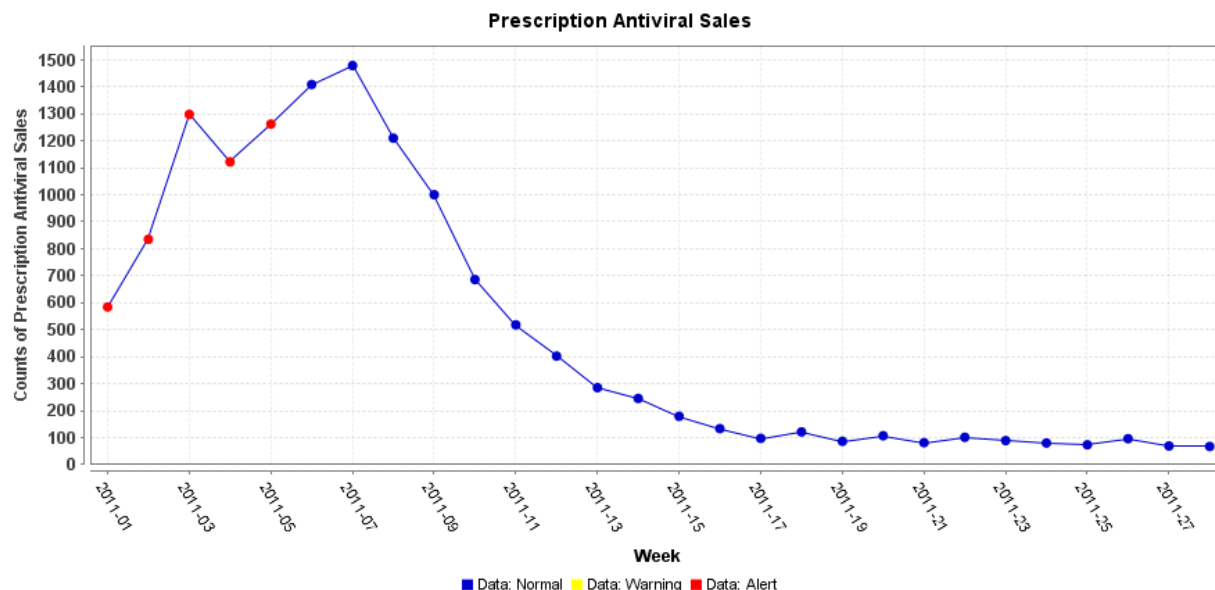
#### OVER-THE-COUNTER (OTC) SALES FOR RESPIRATORY MEDICATIONS:

Graph shows the daily number of over-the-counter respiratory medication sales in Maryland at a large pharmacy chain.



## **PRESCRIPTION ANTIVIRAL SALES:**

Graph shows the weekly number of prescription antiviral sales in Maryland.



## **PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS**

**WHO update:** The current WHO phase of pandemic alert for avian influenza is 3. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

In **Phase 3**, an animal or human-animal influenza reassortant virus has caused sporadic cases or small clusters of disease in people, but has not resulted in human-to-human transmission sufficient to sustain community-level outbreaks. Limited human-to-human transmission may occur under some circumstances, for example, when there is close contact between an infected person and an unprotected caregiver. However, limited transmission under such restricted circumstances does not indicate that the virus has gained the level of transmissibility among humans necessary to cause a pandemic.

As of June 22, 2011, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 562, of which 329 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 59%.

## **NATIONAL DISEASE REPORTS**

**CAMPYLOBACTERIOSIS (ARIZONA AND MEXICO):** 15 July 2011, The CDC is helping Arizona and Mexico health authorities investigate a diarrhea outbreak. It started back in May 2011. "We've seen some increases in our campylobacter infections, which is a real fancy name for a diarrheal kind of infection," said Becky Brooks, director of the Yuma County Public Health Services District. "It causes diarrhea, sometimes abdominal pain, and fever." Brooks said there have been 36 cases in Yuma County in the past 2 months. Normally, there are 28 cases in an entire year. 15 cases also are being studied in the northern Mexican state of Sonora which borders Arizona. 6 of the Yuma cases have developed into Guillain-Barre syndrome, which, Brooks said, "is relatively rare." "It is a condition that can sometimes lead to paralysis in individuals." Officials have not determined how the outbreak started or whether it originated in Arizona or Mexico. "We don't know that part of it," Brooks said. "We are just now finding out all the cases and if there's any kind of connection. We really don't have a source yet. That's what we're working toward." She said there's no sign the infection has spread to other Arizona counties. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) \*Non-suspect case

**SALMONELLOSIS (PENNSYLVANIA):** 15 July 2011, Federal prison officials say over 300 inmates were sickened by salmonellosis at a northeastern Pennsylvania prison in June 2011. The Bureau of Prisons on Fri 15 Jul 2011, said that 320 inmates and 4 staff were sickened at the USA Penitentiary-Canaan in Waymart in an outbreak linked to chicken fajitas served there in June 2011. State health department spokeswoman Christine Cronkright had initially said more than 500 inmates and staff were sickened, but now says the prison bureau's numbers are likely more accurate. The state health department had also said the prison's kitchen was closed, but federal prison officials say it reopened Wed 13 Jul 2011, after passing an inspection. A spokesman at the prison about 135 miles [217 km] north of Philadelphia says he's trying to gather more information on the situation. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) \*Non-suspect case

**E. COLI O104 (ARIZONA):** 11 July 2011, The death of an Arizona man and 5 other USA cases of E. coli [O104:H4] infection were caused by the deadly foodborne outbreak that has ravaged Europe, federal health officials confirmed Fri 8 Jul 2011. The death of the man, who had recently visited Germany, is the 1<sup>st</sup> fatality outside Europe connected to the outbreak that has killed 50 in the EU, according to the CDC. Officials didn't identify him, but said he was older than 65 and lived in Northern Arizona. Overall, 6 cases of confirmed infection with Shiga toxin-producing E. coli O104:H4 have been confirmed in the USA, the CDC said. They include 5 people who recently traveled to Germany. Another victim likely became ill from close contact with a traveler. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) \*Non-suspect case

## **INTERNATIONAL DISEASE REPORTS**

**LEPTOSPIROSIS (PHILIPPINES):** 16 July 2011, With leptospirosis cases skyrocketing in the Philippines due to flooding throughout the archipelago, health officials are expressing alarm over the outbreak and warning citizens to avoid floodwaters or take precautions if they can't avoid it. Officials from the San Lazaro Hospital in Manila reported Tuesday [12 Jul 2011] that they have seen 6 people die due to the bacterial disease since 1 Jul 2011. The hospital has seen 37 total cases in the time frame. The outbreak is large and growing. ABS-CBN News reports that Dr. Lyndon Leesuy, program director of the Department of Health (DOH) Emerging and Re-emerging Infectious Diseases, said a total of 521 leptospirosis cases and 38 deaths were reported from 1 Jan to 25 Jun 2011. The Philippines health department is warning citizens of the bacterial dangers that lurk in the floodwaters and what can be done to prevent potentially deadly infection. Health officials are advising people to not to wade in floodwaters or if it cannot be avoided, to wear protective gear like rubber boots to prevent leptospirosis. Leptospirosis is a bacterial zoonotic disease caused by the corkscrew shaped organism, *Leptospira interrogans*. It goes by several other names depending on the locale; mud fever, swamp fever, sugar cane and Fort Bragg fever, among others. It is a disease of both humans and animals. The rat is the main carrier of *Leptospira*. However, other animals, such as cattle, pigs, horses, and dogs can also be asymptomatic carriers. People become infected by direct or indirect contact with the urine of these animals. Contact with urine-contaminated water is extremely important. Contaminated food and soil containing animal urine are other potential sources of infection. The bacterium enters through contact with skin. Especially through cuts or breaks in the skin and through mucous membranes like the eyes. Found worldwide, it was long considered an occupational disease (miners, farming, vets, and sugarcane harvesting and sewer workers); it is increasingly associated with recreational water sports and camping. The symptoms and disease if present appear in up to 4 weeks after exposure. Sometimes the person will show no symptoms or mild flu-like symptoms. According to the Centers for Disease Control and Prevention (CDC), Leptospirosis may occur in 2 phases; after the 1st phase, with fever, chills, headache, muscle aches, vomiting, or diarrhea, the patient may recover for a time but become ill again. If a 2nd phase occurs, it is more severe; the person may have kidney or liver failure (jaundice) or meningitis. This phase is also called Weil's disease. The infection can be treated with antibiotics (penicillin and doxycycline), especially if started early in the disease. For very ill patients, intensive care support and intravenous (IV) antibiotic may be necessary. (Water Safety Threats are listed in Category B on the CDC List of Critical Biological Agents)\*Non-suspect case

**JAPANESE ENCEPHALITIS AND OTHER (INDIA):** 15 July 2011, The Sivasagar district [Assam state] administration has sent an SOS to Dispur, seeking help in battling encephalitis, which has claimed 21 lives this year [2011], including 10 in the past 10 days. Altogether 79 cases have been reported since January this year [2011]. In Jorhat district [Assam state], the health department is carrying out a massive drive following the detection of about 20 cases of encephalitis and 8 deaths. Only last night [13 Jul 2011], a professor of the crop physiology department of the Assam Agricultural University died of encephalitis. The joint director of health in Sivasagar, Sadhana Dutta, told The Telegraph that the department through the district administration had urged Dispur to send stocks of chemicals like melathion and K-othreon immediately to control the rising number of cases of encephalitis. She said 2 trucks were expected to reach Sivasagar soon. Dutta said the health department was spraying and fogging chemicals in areas under all the 8 public health centres (PHCs) across the district regularly, exhausting the stocks. She said long-lasting insecticide-treated bed nets, too, were distributed in the vulnerable areas. K-Othrine was pasted on bed nets of people residing along the inter-state border and also in other villages from where cases were reported. She said Sivasagar deputy commissioner Jatindra Lahkar had yesterday [13 Jul 2011] convened a meeting with health department officials to review the situation. The chief medical health officer of Sivasagar district, Akhil Hazarika, said of the 79 cases of acute encephalitis syndrome (AES), 15 had symptoms similar to Japanese encephalitis (JE). Of the 21 deaths in Sivasagar district, 6 were from Japanese encephalitis and 15 from AES. Hazarika said among the 8 PHC areas of the district, Geleki, near the Assam-Nagaland border, was the worst hit. (Viral Encephalitis is listed in Category B on the CDC List of Critical Biological Agents)\*Non-suspect case

**E. COLI O104 (EUROPEAN UNION):** 14 July 2011, As of today, the cumulative number of probable and confirmed STEC cases in the EU/EEA is 3,867. This includes 762 HUS STEC cases and 3,105 non-HUS STEC cases. In total, 44 infected persons have died, of which 28 were HUS STEC cases and 16 were non-HUS STEC cases. In Germany, since the last update, 1 HUS STEC case has been excluded, and 20 non-HUS STEC cases have been reported. Within the last 10 days (4-13 July), 1 HUS STEC case and 8 non-HUS STEC cases fell ill. The last known date of illness onset in a patient with confirmed STEC O104 was 7 Jul 2011. This was also the last reported date of illness onset among all cases. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents)\*Non-suspect case

**JAPANESE ENCEPHALITIS (TAIWAN):** 14 July 2011, The Public Health Bureau of the Pingtung County government in Southern Taiwan announced Tuesday [12 Jul 2011] its 1st case of Japanese encephalitis [JE] this year [2011]. The victim, a 44-year-old woman residing in Pingtung City, was diagnosed with the mosquito-borne disease [virus] 11 Jul [2011], becoming the 4th person in Taiwan to contract the disease this year [2011], said the bureau. The woman began suffering from headache and fever 4 Jul [2011] and was hospitalized the next day, where tests confirmed that she had been infected, health officials said. Inspections by the bureau revealed that the patient lived in proximity to rice paddies and chicken coops, which provide ideal breeding conditions for the *Culex* mosquitoes that carry the disease [virus]. The public should avoid rice paddies, livestock quarters, ponds, and



irrigation ditches at dusk, when the mosquitoes are at their most active, bureau officials said. To lower the chances of infection, long sleeves and pants should be worn, and mosquito spray [repellant] should be applied to exposed areas if activity in these places cannot be avoided, the officials added. The Japanese encephalitis season is from May-October and infants should be vaccinated as soon as possible, the bureau said. According to the bureau, adults that work in high-risk areas can get vaccinated but must pay for the shots. (Viral Encephalitis is listed in Category B on the CDC List of Critical Biological Agents)\*Non-suspect case

**ANTHRAX, HUMAN (VIET NAM):** 12 July 2011, A man from the northern mountainous province of Lai Chau has been killed by anthrax with suspected infection from buffalo, a province medical official said Saturday [9 Jul 2011]. [The 40-year-old man], was killed [sic] after hospitalization at the medical center of Than Uyen District, said Pham Xuan Tan, a district preventive health official. Tan said [the man] was among 10 people admitted to the district hospital with anthrax since the beginning of June [2011]. The dead man was only sent in when his condition had become critical with bleeding and sharp pains in the head, Tan said. The man had earlier [been] involved in slaughtering a sick buffalo and developed a black burned spot on his arm afterward, according to investigation. Anthrax is a highly infectious bacterial disease affecting mammals, especially cattle and sheep. It is transmissible to humans and can cause skin ulcers, pneumonia, and even death. (Anthrax is listed in Category A on the CDC List of Critical Biological Agents)\*Non-suspect case

**CHOLERA (HAITI):** 10 July 2011, Aid workers in Haiti are expressing concerns that they won't have enough resources if the latest surge in cholera worsens. After weeks of heavy rains, the number of cases spiked to 1700 a day by the middle of June 2011. While the number has eased somewhat, the Health Ministry says clinics still are getting about 1000 new cases daily. The epidemic began in rural parts of the country last fall [2010]. It's thought likely that U.N. peacekeepers from Nepal brought the disease in. It swept through the countryside of an already impoverished Haiti that had been overwhelmed by a January 2010 earthquake that left hundreds of thousands homeless. The Health Ministry says cholera has sickened at least 370,000 people and killed more than 5,500. (Water Safety Threats are listed in Category B on the CDC List of Critical Biological Agents)\*Non-suspect case

**CHOLERA (DOMINICAN REPUBLIC):** 10 July 2011, A total of 71 people had died from cholera-related diseases since last November 2010, including 9 deaths last week, the Health Ministry said on Fri 8 Jul 2011. The number of suspected cholera cases had risen to 10 760 after 1014 new cases were registered alone in the last week. With the arrival of the rainy season, the ministry has tightened measures to prevent the spread of cholera and other diseases. The 1st cholera cases in the Dominican Republic were detected in November 2010, a month after an outbreak started in neighboring Haiti. (Water Safety Threats are listed in Category B on the CDC List of Critical Biological Agents)\*Non-suspect case

**HANTAVIRUS (CHILE):** 10 July 2011, A 73 year old woman was admitted to the intensive care unit of the Puerto Montt Regional Hospital after having a positive rapid test for [a] hantavirus [infection]. The patient is currently receiving mechanical ventilation. Meanwhile health authorities are investigating those close to her for possible infection. The diagnosis [prognosis] is serious due to compromise of her respiratory and hemodynamic systems, a situation that is under review by specialists. The affected woman comes from the El Azul area of the Palena province. On account of her respiratory problems she was sent to the main health center in the Los Lagos region. (Hantavirus is listed in Category C on the CDC List of Critical Biological Agents)\*Non-suspect case

## **OTHER RESOURCES AND ARTICLES OF INTEREST**

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: <http://preparedness.dhmm.maryland.gov/>

Maryland's Resident Influenza Tracking System: <http://dhmm.maryland.gov/flusurvey>

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**NOTE:** This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.

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